INDEX TO VOLUME 31

AUTHOR INDEX

Adams, D. F.
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
Adams, R. L.
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058
Altman, R. F.
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Ambardar, O. P.
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Anderson, R.
The suppression of microbial aerosols by vegetation, 1279
Aneja, A. P.
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Aneja, V. P.
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Applegate, H. G.
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Armstrong, J. A.
Tethered balloon sampling systems for monitoring air pollution, 735
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Atkinson, R.
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Ayers, K. C.
Air permits for new and modified sources: the significance of June 8, 1981, 397
Baasel, W. D.
A simple technique for determining the maximum ground level concentration of an elevated gaseous release, 866
Bates, D.
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
Beery, W. T.
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
Bennett, A. E.
Limitations of the use of hospital statistics as an index of morbidity in environmental studies, 1276
Bickelhaupt, R. E.
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Bingham, G. E.
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Bishop, Y.
The relationship between air pollution and emergency room visits in an industrial community, 236
Bjerle, I.
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Boldt, K. R.
Analysis of industrial boiler solid waste impacts, 753
Bowermaster, J.
A source of gaseous HNO_3 and its transmission efficiency through various materials, 787
Braslaw, J.
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Bravo A., H.
The altitude: a fundamental parameter in the use of air quality standards, 264
Brennan, E.
Cadmium in foliage alters plant response to tobacco mosaic virus, 166
Brookman, E. T.
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Buckman, F. D.
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Burtis, T. A.
Gross national guilt, 965
Butcher, S. S.
An approach to setting a sulfur standard for coal, 673
Cackette, T.
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Cadle, S. H.
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Candelaria, R. M.
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Carter, W. P. L.
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Chang, J. C. S.
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Clark, J.
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762
Cohen, A. S.
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Conrad, R.
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
Cooke, M. J.
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Cooper, D. W.
A study of the relationship between wind speed and total suspended particulate levels, 395
Minimizing cyclone energy comsumption, 1193
The contributions of open sources to ambient TSP levels, 549
Cotter, S. J.
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
Countess, R. J.
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Cox, W. M.
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762
Coyne, P. I.
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Crocker, T. D.
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31
Crowder, J. W.
Noise considerations in the siting of high volume air samplers, 168
Daisey, J. M.
Transport of PAH into New York City, 567
Darnall, K. R.
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Dasgupta, P. K.
Determination of atmospheric sulfur dioxide without tetrachloromercurate (II): further refinements of a pararosaniline method and field application, 779
Davis, B. L.
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Degani, D. D.
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Dennis, R.
Predicting pressure loss for pulse jet filters, 987
Derwent, R. G.
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Dimitriades, B.
The role of natural organics in photochemical air pollution—issues and research needs, 229
Dixon, D. W.
An approach to setting a sulfur standard for coal, 673
Dockery, D. W.
Personal exposure to respirable particulates and sulfates, 153
Donagi, A. E.
Analysis of air quality data during a day of relatively low emissions, 678
Douville, J. A.
Indexing and abstracting services in the air pollution field, 361
Drehmel, D. C.
Tethered balloon sampling systems for monitoring air pollution, 735
Dulberg, E. M.
Air pollution and asthma: search for a relationship, 370
Durham, M. D.
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Dutkiewicz, V. A.
Comment on "the impact of stratospheric ozone on tropospheric air quality", 400
Duxbury, J. M.
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
Easton, E. B.
Washington report, 330
Washington report, 446
Washington report, 622
Washington report, 720
Eisenbach, R. L.
State of the association, 970
Elder, J. C.
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
Ellis, H. M.
Review of the performance of the RAM model in predicting highest measured concentrations, 148
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Elston, J. C.
Motor vehicle inspection/maintenance programs—a critical review, 524
Motor vehicle inspection/maintenance programs. A critical review: closing remarks, 961
Englund, H. M.
Looking back, 109
Looking back, 329
Looking back, 621
Looking back, 1050
Looking back, 1246

Ettinger, H. J.
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
Evans, J. S.
A study of the relationship between wind speed and total suspended particulate levels, 395
The contributions of open sources to ambient TSP levels, 549
Faoro, R. B.
Trends in benzo(*a*)pyrene, 1966–77, 62
Farwell, S. O.
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
Felkey, J. R.
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Ferman, M. A.
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Ferris, B. G., Jr.
The relationship between air pollution and emergency room visits in an industrial community, 236
Fields, D. E.
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
First, M. W.
Air pollution control association critical reviews program, 523
Flannagan, M. J.
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Flyckt, D.
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Forster, B. A.
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31
Frank, H. M.
Development of a portable zero air system, 882
Frye, R. S.
Air permits for new and modified sources: the significance of June 8, 1981, 397
Fullerton, R. W.
Air quality effects from quenching coke with fresh versus process water, 1054
Furlong, D. A.
Electrostatic stimulation of fabric filtration, 1125
Gage, D. R.
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Gandhi, K.
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
Ganor, E.
Analysis of air quality data during a day of relatively low emissions, 678
Gawreluk, G.
ESP performance capability and utilization: past and future, 1303
Ghiaseddin, M.
Dustfall concentration and analyses at two stations of Tehran, Iran, 997
Giovanni, D. V.
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Glasson, W. A.
Effect of hydrocarbon and NO_x on photochemical smog formation under simulated transport conditions, 1169
Smog chamber simulation of Los Angeles pollutant transport, 648
Goldfield, J.
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
Goldsmith, J. R.
Reevaluating epidemiological monitoring, 393
Goldstein, I. F.
Air pollution and asthma: search for a relationship, 370
Golovoy, A.
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Gooch, J. P.
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Goodwin, R. W.
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744
Gorse, R. A., Jr.
CO emission rates for in-use gasoline and diesel vehicles, 1094
Gorsuch, A. M.
A new partnership, 829
Greenway, A. R.
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Greiner, G. P.
Electrostatic stimulation of fabric filtration, 1125
Griffin, C. N.
Economic development and air quality: complementary goals for local government, 1155
Groblicki, P. J.
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Hagar, W. L.
An *in vitro* system for assessing lung cell response to ozone, 993
Haggerty, B.
Washington report, 214
Hamlin, W. G.
An active role in national policy making, 972
Hammond, J. S.
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Harkov, R.
Cadmium in foliage alters plant response to tobacco mosaic virus, 166
Long-term trends in ambient lead levels at five locations in New Jersey, 783
Harmon, D. L.
Predicting pressure loss for pulse jet filters, 987
Harrington, J. A.
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995
Harrison, R. M.
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Heidorn, K. C.
Trends of airborne particulate lead in Ontario: 1971–1979, 1097
Hill, L. G.
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Hodanbosi, R. F.
Evaluation of RAM Model for Cleveland, Ohio, 253
Hoff, R. M.
Remote SO_2 mass flux measurements using COSPEC, 381
Hoggatt, J. H.
A new microprocessor-controlled dynamic olfactometer, 377
Homolya, J. B.
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Hov, Ø.
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Hovis, L. S.
Electrostatic stimulation of fabric filtration, 1125
Howell, T. C.
Visual colorimetric formaldehyde screening analysis for indoor air, 1181
Hubert, J. S.
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Hubert, R. V.
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Hung, R. J.
Advection fog formation in a polluted atmosphere, 55
Husain, L.
Comment on "the impact of stratospheric ozone on tropospheric air quality", 400
Imandel, K.
Dustfall concentration and analyses at two stations of Tehran, Iran, 997
Jacobson, J. S.
Acid rain and environmental policy, 1071
Jahnig, C. E.
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Jalees, K.
Perception of aircraft noise in India, 1282
Jernegan, M. F.
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Johnson, C. A.
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
Johnson, L. R.
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Jones, F. L.
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
Jones, J. V.
The influence of ozone on the presence of isoflavones in alfalfa foliage, 885
Jones, K. H.
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Karlsson, H. T.
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Kelly, N. A.
An analysis of ozone generation in irradiated Houston air, 565
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Keyes, D. L.
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
Khalil, M. A. K.
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Kim, N. K.
Air pollution evaluations using risk assessment methodology, 120
Klingspor, J.
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Kobayashi, D.
Use of gas ranges for cooking and heating in urban dwellings, 162
Kornegay, F. C.
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Krzeminski, J., Jr.
Washington report, 4
Washington report, 110
Kumar, B.
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
Kurtzweg, J. A.
Economic development and air quality: complementary goals for local government, 1155
Kuykendal, W. B.
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Lagarias, J. S.
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Laird, A. R.
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
Lambert, S.
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Lane, D. A.
Monitoring a chlorine spill from a train derailment, 122
Lane, W. R.
Air quality control equipment guarantees, 808
Lannis, M. D.
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
Lauber, J. D.
Toxic air contaminants—introduction, 119
Laurence, J. A.
Plant pathology, 814

Levine, S. P.
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
A new microprocessor-controlled dynamic olfactometer, 377
Lewis, R. A.
TE effects division environmental report, 14
TE effects division environmental report, 220
TE effects division environmental report, 454
Liaw, G. S.
Advection fog formation in a polluted atmosphere, 55
Linzon, S. N.
Moss bags as monitors of atmospheric deposition, 668
Lioy, P. J.
Transport of PAH into New York City, 567
Littlejohn, J. L.
The inadequacy of PSD increments to protect visibility in class I areas, 879
Liu, P. C.
Review of the performance of the RAM model in predicting highest measured concentrations, 148
Long, E. C., Jr.
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Long, G. E.
An improved interpolation scheme for use in gaussian air quality models, 665
Lue-Hing, C.
The suppression of microbial aerosols by vegetation, 1279
Luken, R. A.
The benefits and costs of regulating benzene, 1254
Luster, G. O.
Concerned about inflation, 975
Macal, C. M.
Cost-effectiveness of a photochemical oxidant episode regulation, 651
McDonald, J. R.
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
McKee, H. C.
Motor vehicle inspection/maintenance programs. A critical review: comments, 956
McLaughlin, D. L.
Moss bags as monitors of atmospheric deposition, 668
McLean, R. A. N.
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
MacNaughton, M. G.
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
McRanie, R. D.
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
McVoy, G. R.
The use of Monte Carlo simulation techniques to quantify the probability of air pollutant dosages and impacts, 881
Mage, D. T.
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Malm, W. C.
The inadequacy of PSD increments to protect visibility in class I areas, 879
Mamane, Y.
Analysis of air quality data during a day of relatively low emissions, 678
Manning, J. A.
Trends in benzo(*a*)pyrene, 1966–77, 62
Mansi, M.
Some heavy-metal pollutants in the air of Naples, 881
Marchant, G. H., Jr.
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Maslany, T. J.
Blast furnace casthouse control technology and recent emissions test data, 1060
Matey, J. S.
CMA newsletter, 224
CMA newsletter, 626
CMA newsletter, 928
CMA newsletter, 1244
Matland, R. H.
A reliability model for sectionalized precipitators, 144
Matthews, T. G.
Visual colorimetric formaldehyde screening analysis for indoor air, 1181
Melamed, D.
Washington report, 826
Washington report, 924
Washington report, 1038
Washington Report, 1144
Washington report, 1242
Menczel, J. H.
Disposal of hazardous wastes: problems and pitfalls, 127
Middleton, P.
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
Miksad, R. W.
An improved interpolation scheme for use in gaussian air quality models, 665
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
Millan, M. M.
Remote SO_2 mass flux measurements using COSPEC, 381
Miller, C. W.
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
Miller, S. G.
The benefits and costs of regulating benzene, 1254
Mitchell, W. J.
A device to spot-check pitot tube accuracy, 1092
Mobley, J. D.
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Molyneux, J. E.
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Moore, A. B., Jr.
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Morse, H. N.
Alabama Air Pollution Control Commission v. Republic Steel Corporation, 1357
Cincinnati Gas and Electric Company v. Costle, 917
Citizens against the Refinery's Effects, Inc. v. United States Environmental Protection Agency, 1235
City of Waco v. Environmental Protection Agency, 103
Columbus and Southern Ohio Electric Company v. Costle, 1031
General Motors Corporation v. Costle, 713
Illinois Environmental Protection Agency v. Pollution Control Board, 346
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
People of the State of California v. Department of the Navy, 323
PPG Industries, Inc. v. Costle, 615
United States Steel Corporation v. Environmental Protection Agency, 789
United States Steel Corporation v. Williams, Director, 1137
Muhlbaier, J. L.
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Munoz, R.
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
Munshi, U.
Application of ATDL type models to Bombay, 998
Nebel, G. J.
The effect of misfueling on aldehyde and other auto exhaust emissions, 877
Nelson, P. F.
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Nir-El, Y.
The location of maximum exposure due to an instantaneous release from a point source, 74
Norbeck, J. M.
CO emission rates for in-use gasoline and diesel vehicles, 1094
O'Brien, P.
The suppression of microbial aerosols by vegetation, 1279
Ogg, R. N.
Disposal of hazardous wastes: problems and pitfalls, 127
Orem, S. R.
IGCI newsletter, 116
IGCI newsletter, 456
IGCI newsletter, 834
IGCI newsletter, 1146
Ott, W. R.
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Overton, J. H.
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Pack, M. R.
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Paksereshi, T.
Dustfall concentration and analyses at two stations of Tehran, Iran, 997
Patashnick, H.
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Patil, R. S.
Application of ATDL type models to Bombay, 998
Pattison, J. N.
Motor vehicle inspection/maintenance programs. A critical review: comments, 957
Peduto, E. F.
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Pell, E. J.
The influence of ozone on the presence of isoflavones in alfalfa foliage, 885
Peters, L. K.
Evaluation of RAM Model for Cleveland, Ohio, 253
Pinkerton, J. E.
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
Pio, C. A.
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Pitts, J. N., Jr.
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Potter, J.
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
Putnicki, G. J.
Noise considerations in the siting of high volume air samplers, 168
Quarles, J.
Maturing environmentalism, 967
Rao, S. T.
On the comparative assessment of the performance of air quality models, 851
Rasmussen, R. A.
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Raufer, R. K.
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Reed, J. R.
Motor vehicle inspection/maintenance programs. A critical review: comments, 951
Renwick, J. A. A.
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
Rinard, G. A.
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Rivers, M. E.
Reciprocity in air quality protection, 208
Roberts, E.
Transport of pollutants along the western shore of Lake Michigan, 385
Robinson, E.
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Roby, R. J.
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995
Roffman, A.
Air pollution control in the iron and steel industry, 1053
Rohac, I. Z.
Trends of airborne particulate lead in Ontario: 1971–1979, 1097
Romano, V.
Some heavy-metal pollutants in the air of Naples, 881
Rosenblum, B.
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261

A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Rubin, E. S.
Air pollution constraints on increased coal use by industry—an international perspective, 349
Rugg, D. E.
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Rupprecht, G.
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Russell, P. A.
Tethered balloon sampling systems for monitoring air pollution, 735
Samet, J. M.
The relationship between air pollution and emergency room visits in an industrial community, 236
Samsa, M. E.
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Sawyer, B.
The suppression of microbial aerosols by vegetation, 1279
Schjoldager, J.
Ambient ozone measurements in Norway 1975–1979, 1187
Schuetzle, D.
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Scruggs, M. A.
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
Sedita, S. J.
The suppression of microbial aerosols by vegetation, 1279
Segal, H.
The influence of aircraft operations on air quality at airports, 846
Seiler, W.
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
Seliber, J.
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
Senatore, F.
Some heavy-metal pollutants in the air of Naples, 881
Sexton, K.
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Transport of pollutants along the western shore of Lake Michigan, 385
Sharp, P. G.
International news, 12
International news, 216
International news, 460
International news, 728
International news, 836
International news, 1042
International news, 1152
Shaver, D. B.
The inadequacy of PSD increments to protect visibility in class I areas, 879
Shaw, H.
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Shaw, R. W., Jr.
A source of gaseous HNO_3 and its transmission efficiency through various materials, 787
Shen, T. T.
Control techniques for gas emissions from hazardous waste landfills, 132
Shriner, D. S.
TE effects division environmental report, 14
TE effects division environmental report, 220
TE effects division environmental report, 454
Singh, H. B.
Comment on "the impact of stratospheric ozone on tropospheric air quality": author's reply, 402
Singpurwalla, N. D.
A reliability model for sectionalized precipitators, 144
Smith, W. J.
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Snyder, J. R.
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Sparks, L. E.
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Tethered balloon sampling systems for monitoring air pollution, 735
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Spawn, P. D.
Blast furnace casthouse control technology and recent emissions test data, 1060
Spedden, S. E.
A study of the relationship between wind speed and total suspended particulate levels, 395
Speizer, F. E.
The relationship between air pollution and emergency room visits in an industrial community, 236
Spendlove, J. C.
The suppression of microbial aerosols by vegetation, 1279
Spengler, J. D.
Development of a portable zero air system, 882
Personal exposure to respirable particulates and sulfates, 153
The relationship between air pollution and emergency room visits in an industrial community, 236
Stafford, R. T.
The exercise of reason, 449
Steiner, B. A.
Air pollution control in the iron and steel industry, 1053
Sterling, T. D.
Use of gas ranges for cooking and heating in urban dwellings, 162
Stockham, J. D.
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
Stordeur, C. M.
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
A new microprocessor-controlled dynamic olfactometer, 377
Stordeur, R. T.
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
A new microprocessor-controlled dynamic olfactometer, 377
Streets, D.
Analysis of industrial boiler solid waste impacts, 753
Strong, R. B.
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Su, G.
A regulatory framework for setting air emission limits for noncriteria pollutants, 160
Sweet, F.
An *in vitro* system for assessing lung cell response to ozone, 993
Sweet, W. E.
An *in vitro* system for assessing lung cell response to ozone, 993
Tardos, G. I.
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Tarquinio, J. J.
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
Tate, R. L., III
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
Temple, P. J.
Moss bags as monitors of atmospheric deposition, 668
Terry, R. E.
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
Thomson, B. A.
Monitoring a chlorine spill from a train derailment, 122
Tillery, M. I.
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
Trozzo, D. L.
Method for determining mass particulate emissions from roof monitors, 1066
Turnage, J. W.
Method for determining mass particulate emissions from roof monitors, 1066
Turner, W. A.
Development of a portable zero air system, 882
Tusa, W.
Analysis of industrial boiler solid waste impacts, 753
Urone, P.
The altitude: a fundamental parameter in the use of air quality standards, 264
Van Atta, D. T.
EPRI newsletter, 8
EPRI newsletter, 342
EPRI newsletter, 724
EPRI newsletter, 1040
VanOsdell, D. W.
Electrostatic stimulation of fabric filtration, 1125
Van Winkle, W.
Noise considerations in the siting of high volume air samplers, 168
Vernon, W. D.
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Viezee, W.
Comment on "the impact of stratospheric ozone on tropospheric air quality": author's reply, 402
Visalli, J. R.
Effects of variable vehicular age and classification distributions in mobile source modeling, 68
On the comparative assessment of the performance of air quality models, 851
Wadden, R. A.
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Wade, W. A., III
Air quality effects from quenching coke with fresh versus process water, 1054
Walker, A. B.
ESP performance capability and utilization: past and future, 1303
Wallis, R. R.
Motor vehicle inspection/maintenance programs. A critical review: comments, 951
Wang, J. C. F.
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Weaver, H. B.
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Weber, E.
Air pollution control strategy in the Federal Republic of Germany, 24
Weeter, D. W.
Utilization of dry calcium based flue gas desulfurization waste as a hazardous waste fixation agent, 751
Westberg, H.
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Transport of pollutants along the western shore of Lake Michigan, 385
Westman, R. C.
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Wilder, J. E.
Predicting pressure loss for pulse jet filters, 987
Wills, R.
Moss bags as monitors of atmospheric deposition, 668
Winer, A. M.
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Witten, A. J.
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Witz, S.
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Wolff, G. T.
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Particulate elemental carbon in the atmosphere, 935
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Wurzel, K. A.
A regulatory framework for setting air emission limits for noncriteria pollutants, 160

Wyman, B. M.
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Yamartino, R.
The influence of aircraft operations on air quality at airports, 846
Yocom, J. E.
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Zeng, H-H.
Precipitation of charged dust particles on electrostatic screen, 389
Zhao, H-Z.
Precipitation of charged dust particles on electrostatic screen, 389

SUBJECT INDEX

Abstracting Services
Indexing and abstracting services in the air pollution field, 361
Accidental Spills
Monitoring a chlorine spill from a train derailment, 122
Acid rain
Acid rain and environmental policy, 1071
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31
Reciprocity in air quality protection, 208
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Activated Carbon
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Additives
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Adipic Acid
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Adsorption
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Aerosols
Advection fog formation in a polluted atmosphere, 55
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
The suppression of microbial aerosols by vegetation, 1279
Transport of PAH into New York City, 567
Age Distribution, Vehicles
Effects of variable vehicular age and classification distributions in mobile source modeling, 68
Agricultural Aspects
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
Plant pathology, 814
The influence of ozone on the presence of isoflavones in alfalfa foliage, 885
Airborne Particulates
Trends of airborne particulate lead in Ontario: 1971–1979, 1097
Aircraft Emissions
People of the State of California v. Department of the Navy, 323
The influence of aircraft operations on air quality at airports, 846
Aircraft Noise
Perception of aircraft noise in India, 1282
Aircraft Observations
Transport of pollutants along the western shore of Lake Michigan, 385
Air Pollution Control
Air pollution control in the iron and steel industry, 1053
Air Pollution Control Association
Air pollution control in the iron and steel industry, 1053
An active role in national policy making, 972
APCA honors three individuals and three sections in 1981 awards program, 978
Concerned about inflation, 975
Gross national guilt, 965
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
State of the association, 970
74th APCA annual meeting and exhibition: a summary of activities, 964
Toxic air contaminants—selected papers from an APCA conference, 119
Airports
The influence of aircraft operations on air quality at airports, 846
Air Quality
Air quality control equipment guarantees, 808
Analysis of air quality data during a day of relatively low emissions, 678
Economic development and air quality: complementary goals for local government, 1155
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Motor vehicle inspection/maintenance programs. A critical review: comments, 956
Reciprocity in air quality protection, 208
The influence of aircraft operations on air quality at airports, 846
Air Quality Control Regions
The influence of aircraft operations on air quality at airports, 846
Air Quality Models
An improved interpolation scheme for use in gaussian air quality models, 665
CO emission rates for in-use gasoline and diesel vehicles, 1094
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
On the comparative assessment of the performance of air quality models, 851
Air Quality Permits
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
Air Quality Standards
Maturing environmentalism, 967
The altitude: a fundamental parameter in the use of air quality standards, 264
Alcohols
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995
Aldehydes
The effect of misfueling on aldehyde and other auto exhaust emissions, 877
Allegheny County, Pennsylvania
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Altitudinal Variations
The altitude: a fundamental parameter in the use of air quality standards, 264
Ambient Air
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
The contributions of open sources to ambient TSP levels, 549
Analytical Methods
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Visual colorimetric formaldehyde screening analysis for indoor air, 1181
Analytical Methods, Sulfur Compounds
Determination of atmospheric sulfur dioxide without tetrachloromercurate (II): further refinements of a pararosaniline method and field application, 779
Analyzers
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Development of a portable zero air system, 882
Animal Effects
Air pollution evaluations using risk assessment methodology, 120
An *in vitro* system for assessing lung cell response to ozone, 993
Annual Meeting
A new partnership, 829
Gross national guilt, 965
State of the association, 970
74th APCA annual meeting and exhibition: a summary of activities, 964
Annual Report
An active role in national policy making, 972
Anthropogenic Pollution
An analysis of ozone generation in irradiated Houston air, 565
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Aromatic Hydrocarbons
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Arsenic
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
Asthma
Air pollution and asthma: search for a relationship, 370
Atmospheric Reactions
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Particulate elemental carbon in the atmosphere, 935
Australia
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Automobiles
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Effects of variable vehicular age and classification distributions in mobile source modeling, 68
Automobiles, Emissions Control
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Motor vehicle inspection/maintenance programs. A critical review: comments, 951
Automobiles, Repair Costs
Motor vehicle inspection/maintenance programs. A critical review: comments, 956
Automotive Emissions
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Motor vehicle inspection/maintenance programs. A critical review: comments, 957
Automotive Exhaust
The effect of misfueling on aldehyde and other auto exhaust emissions, 877
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995
Bag Filters
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058
Electrostatic stimulation of fabric filtration, 1125
Predicting pressure loss for pulse jet filters, 987
Balloon Observations
Tethered balloon sampling systems for monitoring air pollution, 735
Benzene
The benefits and costs of regulating benzene, 1254
Benzo(a)pyrene
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Trends in benzo(*a*)pyrene, 1966–77, 62
Best Available Control Technology (BACT)
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Biogenic Sulfur
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Biological Aspects
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083

Biological Effects
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Biological Indicators
Plant pathology, 814
Blue Ridge Mountains
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Boilers
Air pollution constraints on increased coal use by industry—an international perspective, 349
Analysis of industrial boiler solid waste impacts, 753
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Bromides
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Bubble Policy
Economic development and air quality: complementary goals for local government, 1155
Cadmium
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
Cadmium in foliage alters plant response to tobacco mosaic virus, 166
Calcium
Utilization of dry calcium based flue gas desulfurization waste as a hazardous waste fixation agent, 751
Calibration
A device to spot-check pitot tube accuracy, 1092
Development of a portable zero air system, 882
Visual colorimetric formaldehyde screening analysis for indoor air, 1181
Canada
Reciprocity in air quality protection, 208
Carbon
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Carbon Dioxide
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Carbon Monoxide
CO emission rates for in-use gasoline and diesel vehicles, 1094
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
The effect of misfueling on aldehyde and other auto exhaust emissions, 877
The influence of aircraft operations on air quality at airports, 846
Carcinogens
Air pollution evaluations using risk assessment methodology, 120
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
The benefits and costs of regulating benzene, 1254
Careers
Plant pathology, 814
Cascade Impactor
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Case Histories
Disposal of hazardous wastes: problems and pitfalls, 127
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
Catalysts
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
The effect of misfueling on aldehyde and other auto exhaust emissions, 877
Chambers
An *in vitro* system for assessing lung cell response to ozone, 993
Charged Droplet Scrubbers
Precipitation of charged dust particles on electrostatic screen, 389
Chemical Analysis
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Chemical Industry
CMA newsletter, 224
Chemiluminescent Analysis
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Chemistry
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Chicago
Cost-effectiveness of a photochemical oxidant episode regulation, 651
The suppression of microbial aerosols by vegetation, 1279
Chlorine
Monitoring a chlorine spill from a train derailment, 122
Chromatographic Analysis
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
The influence of ozone on the presence of isoflavones in alfalfa foliage, 885
Clean Air Act
A new partnership, 829
City of Waco v. Environmental Protection Agency, 103
Columbus and Southern Ohio Electric Company v. Costle, 1031
Maturing environmentalism, 967
People of the State of California v. Department of the Navy, 323
The exercise of reason, 449
Cleveland
Evaluation of RAM Model for Cleveland, Ohio, 253
Climatology
Particulate elemental carbon in the atmosphere, 935
Coal
Air pollution constraints on increased coal use by industry—an international perspective, 349
An approach to setting a sulfur standard for coal, 673
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Coal Fired Boilers
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
Analysis of industrial boiler solid waste impacts, 753
Electrostatic stimulation of fabric filtration, 1125
Coke Ovens
Air quality effects from quenching coke with fresh versus process water, 1054
Trends in benzo(*a*)pyrene, 1966–77, 62
United States Steel Corporation v. Williams, Director, 1137
Coke Quench Towers
Air quality effects from quenching coke with fresh versus process water, 1054
Collection Efficiency
Electrostatic stimulation of fabric filtration, 1125
Precipitation of charged dust particles on electrostatic screen, 389
Colorimetry
Determination of atmospheric sulfur dioxide without tetrachloromercurate (II): further refinements of a pararosaniline method and field application, 779
Visual colorimetric formaldehyde screening analysis for indoor air, 1181
Combustion
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744
Committees, APCA
Air pollution control in the iron and steel industry, 1053
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744
Comparative Study
On the comparative assessment of the performance of air quality models, 851
Compliance
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
Compliance Schedules
United States Steel Corporation v. Environmental Protection Agency, 789
Computer Applications
An improved interpolation scheme for use in gaussian air quality models, 665
Cincinnati Gas and Electric Company v. Costle, 917
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Concentration Distribution
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762
A simple technique for determining the maximum ground level concentration of an elevated gaseous release, 866
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
Condensation Nuclei
Advection fog formation in a polluted atmosphere, 55
Conferences
Air pollution control in the iron and steel industry, 1053
ESP performance capability and utilization: past and future, 1303
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
Particulate elemental carbon in the atmosphere, 935
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
Toxic air contaminants—selected papers from an APCA conference, 119
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744
Consultants
Consultant guide/1982, 1335
Consumer Product Safety Commission
The benefits and costs of regulating benzene, 1254
Continuous Monitoring
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Control Equipment
Air quality control equipment guarantees, 808
Control Strategies
Air pollution control strategy in the Federal Republic of Germany, 24
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Control Technology
Control techniques for gas emissions from hazardous waste landfills, 132
Motor vehicle inspection/maintenance programs—a critical review, 524
Control Technology News
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Air quality control equipment guarantees, 808
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Cooling Towers
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Copper
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
Cost Analysis
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596

Analysis of industrial boiler solid waste impacts, 753
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Motor vehicle inspection/maintenance programs—a critical review, 524
Cost Benefit Analysis
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
The benefits and costs of regulating benzene, 1254
Costs
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Electrostatic stimulation of fabric filtration, 1125
Criteria Pollutants
Air permits for new and modified sources: the significance of June 8, 1981, 397
Critical Reviews
Air pollution control association critical reviews program, 523
Motor vehicle inspection/maintenance programs—a critical review, 524
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Motor vehicle inspection/maintenance programs. A critical review: comments, 951
Motor vehicle inspection/maintenance programs. A critical review: comments, 956
Motor vehicle inspection/maintenance programs. A critical review: comments, 957
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
Motor vehicle inspection/maintenance programs. A critical review: closing remarks, 961
Cutters
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Cyclones
Minimizing cyclone energy comsumption, 1193
Data Analysis
Analysis of air quality data during a day of relatively low emissions, 678
Demonstration Grants
Economic development and air quality: complementary goals for local government, 1155
Denitrification
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
Denver
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Denver Research Institute
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Deposition
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Moss bags as monitors of atmospheric deposition, 668
Desulfurization
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
Desulfurization Processes
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Diesel Engines, Emissions Control
CO emission rates for in-use gasoline and diesel vehicles, 1094
Diffusion Measurement
A source of gaseous HNO_3 and its transmission efficiency through various materials, 787
Diffusion Models
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Application of ATDL type models to Bombay, 998
Cincinnati Gas and Electric Company v. Costle, 917
Dispersion Models
Air quality effects from quenching coke with fresh versus process water, 1054
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Columbus and Southern Ohio Electric Company v. Costle, 1031
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
Evaluation of RAM Model for Cleveland, Ohio, 253
On the comparative assessment of the performance of air quality models, 851
Review of the performance of the RAM model in predicting highest measured concentrations, 148
The contributions of open sources to ambient TSP levels, 549
Diurnal Variations
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
CO emission rates for in-use gasoline and diesel vehicles, 1094
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Dosimetry
The use of Monte Carlo simulation techniques to quantify the probability of air pollutant dosages and impacts, 881
Dust Collection
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Dust Control
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Dustfall Measurements
Dustfall concentration and analyses at two stations of Tehran, Iran, 997
Dust Separation Models
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Ecological Effects
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Economic Aspects
Air pollution constraints on increased coal use by industry—an international perspective, 349
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31
Economic development and air quality: complementary goals for local government, 1155
ESP performance capability and utilization: past and future, 1303
Efficiency
A source of gaseous HNO_3 and its transmission efficiency through various materials, 787
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
Electrical Properties
Electrostatic stimulation of fabric filtration, 1125
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Electric Furnaces
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058
Electric Power Plants
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Cincinnati Gas and Electric Company v. Costle, 917
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
Electrostatic Precipitators
A reliability model for sectionalized precipitators, 144
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
ESP performance capability and utilization: past and future, 1303
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Precipitation of charged dust particles on electrostatic screen, 389
The EPA/DRI Valmont electrostatic precipitator test facility, 908
El Paso
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Emergency Room Visits
Air pollution and asthma: search for a relationship, 370
Emission Control
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
CO emission rates for in-use gasoline and diesel vehicles, 1094
Emission Control Equipment
Blast furnace casthouse control technology and recent emissions test data, 1060
Emission Fees
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Emission Inventories
Evaluation of RAM Model for Cleveland, Ohio, 253
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
Emission Limits
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
Emission Models
Analysis of air quality data during a day of relatively low emissions, 678
Emissions
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Air permits for new and modified sources: the significance of June 8, 1981, 397
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Motor vehicle inspection/maintenance programs—a critical review, 524
The role of natural organics in photochemical air pollution—issues and research needs, 229
Emission Sources
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Emission Standards
Air pollution control strategy in the Federal Republic of Germany, 24
Analysis of industrial boiler solid waste impacts, 753
Energy
Air pollution constraints on increased coal use by industry—an international perspective, 349
Energy Consumption
Minimizing cyclone energy comsumption, 1193
Energy Sources
Air pollution constraints on increased coal use by industry—an international perspective, 349
Engineering Design
Review of the performance of the RAM model in predicting highest measured concentrations, 148
Engines
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
Environmental Chambers
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Smog chamber simulation of Los Angeles pollutant transport, 648
The influence of ozone on the presence of isoflavones in alfalfa foliage, 885
Environmental Protection Agency
A new partnership, 829

City of Waco v. Environmental Protection Agency, 103
Columbus and Southern Ohio Electric Company v. Costle, 1031
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
PPG Industries, Inc. v. Costle, 615
Review of the performance of the RAM model in predicting highest measured concentrations, 148
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
The benefits and costs of regulating benzene, 1254
The EPA/DRI Valmont electrostatic precipitator test facility, 908

Epidemiological Aspects
Air pollution evaluations using risk assessment methodology, 120
Limitations of the use of hospital statistics as an index of morbidity in environmental studies, 1276
Personal exposure to respirable particulates and sulfates, 153
Reevaluating epidemiological monitoring, 393

Episodes
Ambient ozone measurements in Norway 1975–1979, 1187
Cost-effectiveness of a photochemical oxidant episode regulation, 651

Equipment
Product guide/1981, 309

Equipment Design
Air quality control equipment guarantees, 808
A reliability model for sectionalized precipitators, 144
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058
Electrostatic stimulation of fabric filtration, 1125
Minimizing cyclone energy comsumption, 1193
The EPA/DRI Valmont electrostatic precipitator test facility, 908

Exhaust Gases
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995

Experimental Techniques
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
An *in vitro* system for assessing lung cell response to ozone, 993

Exposure Tests
Motor vehicle inspection/maintenance programs. A critical review: comments, 947

Extinction Coefficients
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074

Extreme Values
On the comparative assessment of the performance of air quality models, 851

Fabric Filters
ESP performance capability and utilization: past and future, 1303
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95

Factor Analysis
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762

Federal Agencies
A new partnership, 829

Federal Aviation Administration
The influence of aircraft operations on air quality at airports, 846

Fertilizers
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767

Field Testing
Determination of atmospheric sulfur dioxide without tetrachloromercurate (II): further refinements of a pararosaniline method and field application, 779

Filters
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
Predicting pressure loss for pulse jet filters, 987

Filtration
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95

Filtration Efficiency
Minimizing cyclone energy comsumption, 1193

Financial Aspects
Concerned about inflation, 975

Fish
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31

Flame Photometers
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083

Florida
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173

Flow Properties
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981

Flue Gas Desulfurization
Sulfur gas emissions from stored flue gas desulfurization sludges, 557

Flue Gases
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177

Flue Gases, Analysis
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291

Flue Gases, Conditioning
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221

Flue Gases, Desulfurization
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Utilization of dry calcium based flue gas desulfurization waste as a hazardous waste fixation agent, 751
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744

Fluorescence
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101

Fluorescent Tracers
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871

Fluorocarbons
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274

Fly Ash Collection
ESP performance capability and utilization: past and future, 1303

Fogging
Advection fog formation in a polluted atmosphere, 55

Forest Fires
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661

Forest Products Industry
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163

Forests
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661

Formaldehyde
Visual colorimetric formaldehyde screening analysis for indoor air, 1181

Fossil Fuels
Advection fog formation in a polluted atmosphere, 55
Analysis of industrial boiler solid waste impacts, 753
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31

Fuel Composition
The effect of misfueling on aldehyde and other auto exhaust emissions, 877

Fuel Consumption
Motor vehicle inspection/maintenance programs. A critical review: comments, 958

Fuel Problems
The effect of misfueling on aldehyde and other auto exhaust emissions, 877

Fuels
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995

Fugitive Emissions
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
The contributions of open sources to ambient TSP levels, 549

Fume Control
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058

Fumigations
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65

Furnace
Blast furnace casthouse control technology and recent emissions test data, 1060
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268

Gas Chromatographic Analysis
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083

Gaseous Pollutants
Air pollution control strategy in the Federal Republic of Germany, 24
Control techniques for gas emissions from hazardous waste landfills, 132
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Sulfur gas emissions from stored flue gas desulfurization sludges, 557

Gasoline Engines
CO emission rates for in-use gasoline and diesel vehicles, 1094
Trends of airborne particulate lead in Ontario: 1971–1979, 1097

Gas Ranges
Use of gas ranges for cooking and heating in urban dwellings, 162

General Motors Dispersion Experiment
On the comparative assessment of the performance of air quality models, 851

Geographic Aspects
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241

Germany
Air pollution control strategy in the Federal Republic of Germany, 24

Glass Fiber Filters
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95

Global Air Pollution
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256

Government Affairs Seminar
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629

Ground Level Distribution
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
A simple technique for determining the maximum ground level concentration of an elevated gaseous release, 866
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871

Hazardous Pollutants
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Control techniques for gas emissions from hazardous waste landfills, 132
Disposal of hazardous wastes: problems and pitfalls, 127
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
Utilization of dry calcium based flue gas desulfurization waste as a hazardous waste fixation agent, 751

Health Effects
Air pollution and asthma: search for a relationship, 370
Air pollution control strategy in the Federal

Republic of Germany, 24
Air pollution evaluations using risk assessment methodology, 120
An *in vitro* system for assessing lung cell response to ozone, 993
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Limitations of the use of hospital statistics as an index of morbidity in environmental studies, 1276
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
Reevaluating epidemiological monitoring, 393
The benefits and costs of regulating benzene, 1254
The relationship between air pollution and emergency room visits in an industrial community, 236

Heavy Metals
Some heavy-metal pollutants in the air of Naples, 881

High Intensity Ionizer
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221

High Volume Samplers
Noise considerations in the siting of high volume air samplers, 168
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241

History
Indexing and abstracting services in the air pollution field, 361
Looking back, 109
Looking back, 329
Looking back, 621
Looking back, 1050
Looking back, 1246
The benefits and costs of regulating benzene, 1254

Honors and Awards
APCA honors three individuals and three sections in 1981 awards program, 978

Hot Side Precipitators
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291

Humidity
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247

Hydrocarbons
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
An analysis of ozone generation in irradiated Houston air, 565
Citizens against the Refinery's Effects, Inc. v. United States Environmental Protection Agency, 1235
Effect of hydrocarbon and NO_x on photochemical smog formation under simulated transport conditions, 1169
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
The effect of misfueling on aldehyde and other auto exhaust emissions, 877
The influence of aircraft operations on air quality at airports, 846
The role of natural organics in photochemical air pollution—issues and research needs, 229

Hydrochloric Acid
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177

Hydrogen Sulfide
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083

Hydroxyl Radical
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090

Immission Standards
Air pollution control strategy in the Federal Republic of Germany, 24

Impactors
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247

Incineration
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747

Index Systems
Indexing and abstracting services in the air pollution field, 361

India
Application of ATDL type models to Bombay, 998
Perception of aircraft noise in India, 1282

Indoor Levels
Personal exposure to respirable particulates and sulfates, 153
Use of gas ranges for cooking and heating in urban dwellings, 162
Visual colorimetric formaldehyde screening analysis for indoor air, 1181

Industrial Gas Cleaning Institute
ESP performance capability and utilization: past and future, 1303

Industrial Problems
Disposal of hazardous wastes: problems and pitfalls, 127
PPG Industries, Inc. v. Costle, 615

Industrial Sources
Air pollution constraints on increased coal use by industry—an international perspective, 349
Analysis of industrial boiler solid waste impacts, 753
Control techniques for gas emissions from hazardous waste landfills, 132
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
The relationship between air pollution and emergency room visits in an industrial community, 236

Insight
A new partnership, 829
Reciprocity in air quality protection, 208
The exercise of reason, 449

Inspection
Motor vehicle inspection/maintenance programs—a critical review, 524
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Motor vehicle inspection/maintenance programs. A critical review: comments, 951
Motor vehicle inspection/maintenance programs. A critical review: comments, 956
Motor vehicle inspection/maintenance programs. A critical review: comments, 957
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
Motor vehicle inspection/maintenance programs. A critical review: closing remarks, 961

Instrumentation
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Monitoring a chlorine spill from a train derailment, 122

Instruments
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194

International Studies
Air pollution constraints on increased coal use by industry—an international perspective, 349

Iran
Dustfall concentration and analyses at two stations of Tehran, Iran, 997

Iron and Steel Industry
Air pollution control in the iron and steel industry, 1053

Irradiation Chambers
An analysis of ozone generation in irradiated Houston air, 565

Irradiation Effects
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Effect of hydrocarbon and NO_x on photochemical smog formation under simulated transport conditions, 1169

Italy
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058

Jet Aircraft
People of the State of California v. Department of the Navy, 323

Keynote
Gross national guilt, 965
Maturing environmentalism, 967

Kinetics
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177

Kinetic Scheme
An analysis of ozone generation in irradiated Houston air, 565

Landfills
Control techniques for gas emissions from hazardous waste landfills, 132

Lead
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Long-term trends in ambient lead levels at five locations in New Jersey, 783
Moss bags as monitors of atmospheric deposition, 668
Trends of airborne particulate lead in Ontario: 1971–1979, 1097

Legal Aspects
Air pollution control strategy in the Federal Republic of Germany, 24
City of Waco v. Environmental Protection Agency, 103
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
United States Steel Corporation v. Environmental Protection Agency, 789

Legal Briefs
Alabama Air Pollution Control Commission v. Republic Steel Corporation, 1357
Cincinnati Gas and Electric Company v. Costle, 917
Citizens against the Refinery's Effects, Inc. v. United States Environmental Protection Agency, 1235
City of Waco v. Environmental Protection Agency, 103
Columbus and Southern Ohio Electric Company v. Costle, 1031
General Motors Corporation v. Costle, 713
Illinois Environmental Protection Agency v. Pollution Control Board, 346
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
People of the State of California v. Department of the Navy, 323
PPG Industries, Inc. v. Costle, 615
United States Steel Corporation v. Environmental Protection Agency, 789
United States Steel Corporation v. Williams, Director, 1137

Legislation
Air pollution control strategy in the Federal Republic of Germany, 24
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
The exercise of reason, 449
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136

Light Intensity
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262

Light Scattering
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074

Lime
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177

Limestone Scrubbing
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249

Literature Surveys
Indexing and abstracting services in the air pollution field, 361

Local Problems
Economic development and air quality: complementary goals for local government, 1155

Los Angeles
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants

at a Los Angeles site, 1098
Smog chamber simulation of Los Angeles pollutant transport, 648
Maintenance
Motor vehicle inspection/maintenance programs—a critical review, 524
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Motor vehicle inspection/maintenance programs. A critical review: comments, 951
Motor vehicle inspection/maintenance programs. A critical review: comments, 956
Motor vehicle inspection/maintenance programs. A critical review: comments, 957
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
Motor vehicle inspection/maintenance programs. A critical review: closing remarks, 961
Manufacturers
Product guide/1981, 309
Product guide/1981, 309
Market Analysis
ESP performance capability and utilization: past and future, 1303
Marketing
ESP performance capability and utilization: past and future, 1303
Market Projection
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Mass Concentration
Method for determining mass particulate emissions from roof monitors, 1066
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Mass Spectrometry
Monitoring a chlorine spill from a train derailment, 122
Mass Transfer
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Mathematical Models
Advection fog formation in a polluted atmosphere, 55
A simple technique for determining the maximum ground level concentration of an elevated gaseous release, 866
Precipitation of charged dust particles on electrostatic screen, 389
Predicting pressure loss for pulse jet filters, 987
The location of maximum exposure due to an instantaneous release from a point source, 74
Measurement
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
Measurement Systems
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Measurement Techniques
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Particulate elemental carbon in the atmosphere, 935
Remote SO_2 mass flux measurements using COSPEC, 381
Metallurgical Processes
Blast furnace casthouse control technology and recent emissions test data, 1060
Utilization of dry calcium based flue gas desulfurization waste as a hazardous waste fixation agent, 751
Metals
Dustfall concentration and analyses at two stations of Tehran, Iran, 997
Meteorological Aspects
Ambient ozone measurements in Norway 1975–1979, 1187
Application of ATDL type models to Bombay, 998
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Tethered balloon sampling systems for monitoring air pollution, 735
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
The relationship between air pollution and emergency room visits in an industrial community, 236
Meteorological Conditions
Transport of pollutants along the western shore of Lake Michigan, 385
Meteorological Effects
Acid rain and environmental policy, 1071
Mexico
The altitude: a fundamental parameter in the use of air quality standards, 264
Microorganisms
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
The suppression of microbial aerosols by vegetation, 1279
Microscopy
Tethered balloon sampling systems for monitoring air pollution, 735
Minnesota
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Mobile Sources
Motor vehicle inspection/maintenance programs—a critical review, 524
Models
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
An analysis of ozone generation in irradiated Houston air, 565
An approach to setting a sulfur standard for coal, 673
An improved interpolation scheme for use in gaussian air quality models, 665
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
A regulatory framework for setting air emission limits for noncriteria pollutants, 160
A reliability model for sectionalized precipitators, 144
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
A study of the relationship between wind speed and total suspended particulate levels, 395
Decision problems in the control of acid precipitation: nonconvexities and irreversibilities, 31
Effects of variable vehicular age and classification distributions in mobile source modeling, 68
Evaluation of RAM Model for Cleveland, Ohio, 253
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Personal exposure to respirable particulates and sulfates, 153
Remote SO_2 mass flux measurements using COSPEC, 381
Review of the performance of the RAM model in predicting highest measured concentrations, 148
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
The influence of aircraft operations on air quality at airports, 846
Models, Dust Separation
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Modified Sources
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
Monitoring
Air permits for new and modified sources: the significance of June 8, 1981, 397
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Method for determining mass particulate emissions from roof monitors, 1066
Monitoring a chlorine spill from a train derailment, 122
Moss bags as monitors of atmospheric deposition, 668
Reevaluating epidemiological monitoring, 393
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Monitoring Instruments
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Monitoring Networks
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762
Long-term trends in ambient lead levels at five locations in New Jersey, 783
Trends of airborne particulate lead in Ontario: 1971–1979, 1097
Monitoring Systems
Tethered balloon sampling systems for monitoring air pollution, 735
The influence of aircraft operations on air quality at airports, 846
Morbidity
Limitations of the use of hospital statistics as an index of morbidity in environmental studies, 1276
Mortality
Air pollution evaluations using risk assessment methodology, 120
Limitations of the use of hospital statistics as an index of morbidity in environmental studies, 1276
Moss Bags
Moss bags as monitors of atmospheric deposition, 668
Municipal Incinerators
Disposal of hazardous wastes: problems and pitfalls, 127
Naples
Some heavy-metal pollutants in the air of Naples, 881
National Air Surveillance Network
Long-term trends in ambient lead levels at five locations in New Jersey, 783
Trends in benzo(*a*)pyrene, 1966–77, 62
National Commission on Air Quality
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
The exercise of reason, 449
Natural Gas
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Use of gas ranges for cooking and heating in urban dwellings, 162
Natural Sources
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
The role of natural organics in photochemical air pollution—issues and research needs, 229
New Jersey
Long-term trends in ambient lead levels at five locations in New Jersey, 783
New Mexico
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
Newsletter
CMA newsletter, 224
CMA newsletter, 626
CMA newsletter, 928
CMA newsletter, 1244
EPRI newsletter, 8
EPRI newsletter, 342
EPRI newsletter, 724
EPRI newsletter, 1040
IGCI newsletter, 116
IGCI newsletter, 456
IGCI newsletter, 834
IGCI newsletter, 1146
International news, 12
International news, 216
International news, 460
International news, 728
International news, 836
International news, 1042
International news, 1152
TE effects division environmental report, 14
TE effects division environmental report, 220
TE effects division environmental report, 454
Washington report, 4
Washington report, 110
Washington report, 214
Washington report, 330
Washington report, 446
Washington report, 622
Washington report, 720
Washington report, 826
Washington report, 924
Washington report, 1038

Washington Report, 1144
Washington report, 1242
New Source Performance Standards
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
New Sources
Air permits for new and modified sources: the significance of June 8, 1981, 397
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
New York
Air pollution and asthma: search for a relationship, 370
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
New York City
Transport of PAH into New York City, 567
Nitrates
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Nitric Acid
A source of gaseous HNO_3 and its transmission efficiency through various materials, 787
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Nitrogen Compounds
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995
Nitrogen Dioxide
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
The influence of aircraft operations on air quality at airports, 846
Nitrogen Oxides
Effect of hydrocarbon and NO_x on photochemical smog formation under simulated transport conditions, 1169
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
The relationship between air pollution and emergency room visits in an industrial community, 236
The role of natural organics in photochemical air pollution—issues and research needs, 229
Transport of pollutants along the western shore of Lake Michigan, 385
Noise
Perception of aircraft noise in India, 1282
Noise Sources
Noise considerations in the siting of high volume air samplers, 168
Nonattainment Areas
Cincinnati Gas and Electric Company v. Costle, 917
City of Waco v. Environmental Protection Agency, 103
Columbus and Southern Ohio Electric Company v. Costle, 1031
General Motors Corporation v. Costle, 713
Maturing environmentalism, 967
PPG Industries, Inc. v. Costle, 615
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
Noncriteria Pollutants
A regulatory framework for setting air emission limits for noncriteria pollutants, 160
Norway
Ambient ozone measurements in Norway 1975–1979, 1187
Odor Measurement
A new microprocessor-controlled dynamic olfactometer, 377
Offset Policy
Economic development and air quality: complementary goals for local government, 1155
Offset Strategies
Citizens against the Refinery's Effects, Inc. v. United States Environmental Protection Agency, 1235
Ohio
General Motors Corporation v. Costle, 713
United States Steel Corporation v. Williams, Director, 1137
Oil-Fired Equipment
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Olfactometry
A new microprocessor-controlled dynamic olfactometer, 377
Ontario
Trends of airborne particulate lead in Ontario: 1971–1979, 1097
Opacity
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Operating Conditions
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
Optical Properties
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Oregon
Motor vehicle inspection/maintenance programs. A critical review: comments, 939
Organic Acids
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
Organic Compounds
A device for measuring volatile organic-carbon emissions from cooling-tower water, 1280
Air pollution control strategy in the Federal Republic of Germany, 24
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Organic nitrites in aged exhaust from alcohol-fueled vehicles, 995
The role of natural organics in photochemical air pollution—issues and research needs, 229
Organic Soils
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
Organic Solvents
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
OSHA Regulations
The benefits and costs of regulating benzene, 1254
Outdoor Levels
Personal exposure to respirable particulates and sulfates, 153
Oxidants
Ambient ozone measurements in Norway 1975–1979, 1187
An analysis of ozone generation in irradiated Houston air, 565
Smog chamber simulation of Los Angeles pollutant transport, 648
Transport of pollutants along the western shore of Lake Michigan, 385
Oxidation
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Ozone
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762
Ambient ozone measurements in Norway 1975–1979, 1187
An analysis of ozone generation in irradiated Houston air, 565
An *in vitro* system for assessing lung cell response to ozone, 993
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
Comment on "the impact of stratospheric ozone on tropospheric air quality", 400
Comment on "the impact of stratospheric ozone on tropospheric air quality": author's reply, 402
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Decline in the atmospheric accumulation rates of CCl_3F (F-11), CCl_2F_2 (F-12) and CH_3CCl_3, 1274
Effect of hydrocarbon and NO_x on photochemical smog formation under simulated transport conditions, 1169
Effects of constant *versus* diurnally-varying light intensity on ozone formation, 262
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Motor vehicle inspection/maintenance programs. A critical review: comments, 947
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
The influence of ozone on the presence of isoflavones in alfalfa foliage, 885
The role of natural organics in photochemical air pollution—issues and research needs, 229
Transport of pollutants along the western shore of Lake Michigan, 385
Paint Bake Ovens
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Painting
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Parking Facilities
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Particle Collection
Tethered balloon sampling systems for monitoring air pollution, 735
Particle Dynamics
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Particle Size Distribution
Blast furnace casthouse control technology and recent emissions test data, 1060
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Particulates
Air pollution and asthma: search for a relationship, 370
Air pollution constraints on increased coal use by industry—an international perspective, 349
Air quality control equipment guarantees, 808
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Particulate elemental carbon in the atmosphere, 935
Personal exposure to respirable particulates and sulfates, 153
The inadequacy of PSD increments to protect visibility in class I areas, 879
The location of maximum exposure due to an instantaneous release from a point source, 74
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
The relationship between air pollution and emergency room visits in an industrial community, 236
Transport of pollutants along the western shore of Lake Michigan, 385
Particulates, Concentration
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773

Particulates, Emission
Air quality effects from quenching coke with fresh versus process water, 1054
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
United States Steel Corporation v. Williams, Director, 1137
Particulates, Emissions Control
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
ESP performance capability and utilization: past and future, 1303
Particulates, Measurement
Method for determining mass particulate emissions from roof monitors, 1066
Particulates, Sampling
Method for determining mass particulate emissions from roof monitors, 1066
Penetration
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
Minimizing cyclone energy comsumption, 1193
Performance Testing
ESP performance capability and utilization: past and future, 1303
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Permit Systems
Air permits for new and modified sources: the significance of June 8, 1981, 397
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
Illinois Environmental Protection Agency v. Pollution Control Board, 346
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
Peroxyacetyl Pollutants
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Photochemical Oxidants
Ambient ozone measurements in Norway 1975–1979, 1187
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Photochemical Pollutants
Smog chamber simulation of Los Angeles pollutant transport, 648
The role of natural organics in photochemical air pollution—issues and research needs, 229
Photochemical Reactions
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Photolysis
An experimental protocol for the determination of OH radical rate constants with organics using methyl nitrite photolysis as an OH radical source, 1090
A simple method for estimating the influence of cloud cover on the NO_2 photolysis rate constant, 42
Photosynthesis
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Pilot Plants
Electrostatic stimulation of fabric filtration, 1125
Pine
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Pines
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
Pitot Tubes
A device to spot-check pitot tube accuracy, 1092
Planetary Boundary Layer
Tethered balloon sampling systems for monitoring air pollution, 735
Plant Pathology
Plant pathology, 814
Plants
Plant pathology, 814
Plumes
An improved interpolation scheme for use in gaussian air quality models, 665
A reexamination of the ozone limiting approach to estimating short-term NO_2 concentrations, 671
Hydrocarbon production and photochemical ozone formation in forest burn plumes, 661
Monitoring a chlorine spill from a train derailment, 122
The location of maximum exposure due to an instantaneous release from a point source, 74
Policy
Acid rain and environmental policy, 1071
A new partnership, 829
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Reciprocity in air quality protection, 208
The exercise of reason, 449
Pollutant Transport
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
Reciprocity in air quality protection, 208
Remote SO_2 mass flux measurements using COSPEC, 381
Smog chamber simulation of Los Angeles pollutant transport, 648
Transport of PAH into New York City, 567
Transport of pollutants along the western shore of Lake Michigan, 385
Polycyclic Hydrocarbons
Transport of PAH into New York City, 567
Trends in benzo(*a*)pyrene, 1966–77, 62
Ponding
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
Portable Sampling Systems
Development of a portable zero air system, 882
Precipitation
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Precipitator Chambers
A reliability model for sectionalized precipitators, 144
Precipitator, Design
A reliability model for sectionalized precipitators, 144
Precipitators
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Presidential Address
State of the association, 970
Pressure Drop
Electrostatic stimulation of fabric filtration, 1125
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
Predicting pressure loss for pulse jet filters, 987
Prevention of Significant Deterioration (PSD)
Air permits for new and modified sources: the significance of June 8, 1981, 397
Experience of the forest products industry in obtaining air quality permits for new and modified sources, 1163
The inadequacy of PSD increments to protect visibility in class I areas, 879
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Probes
A device to spot-check pitot tube accuracy, 1092
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Evaluation of EPA method 5 probe deposition and filter media efficiency, 66
Process Control
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
A comparative assessment of flue gas treatment processes part II—environmental and cost comparison, 596
Product Guide/1981
Product guide/1981, 309
Product guide/1981, 309
Professional Development Programs
Plant pathology, 814
Provenance Factor Analysis
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Pulse Energization
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Radioactive Emissions
The location of maximum exposure due to an instantaneous release from a point source, 74
Railroads
Monitoring a chlorine spill from a train derailment, 122
Reactors, Fixed Bed
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Regression Analysis
Air pollution and asthma: search for a relationship, 370
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
The contributions of open sources to ambient TSP levels, 549
Regulations
Air permits for new and modified sources: the significance of June 8, 1981, 397
Air pollution constraints on increased coal use by industry—an international perspective, 349
A regulatory framework for setting air emission limits for noncriteria pollutants, 160
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Motor vehicle inspection/maintenance programs. A critical review: comments, 945
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
The benefits and costs of regulating benzene, 1254
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Relative Humidity
Advection fog formation in a polluted atmosphere, 55
Reliability Models
A reliability model for sectionalized precipitators, 144
Research and Development
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Residential Heating
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Resistivity
Assessment of the commercial potential for the high intensity ionizer in the electric utility industry, 1221
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Resource Conservation Recovery Act
Panel discussion: impact of the resource and recovery act on power generation and incineration, 747
Respirable Particulates
Personal exposure to respirable particulates and sulfates, 153
Respiratory System
The relationship between air pollution and emergency room visits in an industrial community, 236
Risk Analysis
Acid rain and environmental policy, 1071
Air pollution and asthma: search for a relationship, 370
The benefits and costs of regulating benzene, 1254
Risk Assessment
Air pollution evaluations using risk assessment methodology, 120
Roads
The contributions of open sources to ambient TSP levels, 549
Rural Pollutant Levels
Review of the performance of the RAM model in predicting highest measured concentrations, 148
The role of natural organics in photochemical air pollution—issues and research needs, 229
Saline Particles
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Sampling
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Measuring air quality levels inexpensively at multiple locations by random sampling, 365
Some heavy-metal pollutants in the air of Naples, 881
Sampling Methods
Apparatus for simultaneous size-differentiated

sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
A survey of ambient air levels of lead in El Paso, Texas from 1972–1979, 259
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Sampling Systems
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Tethered balloon sampling systems for monitoring air pollution, 735
Scrubbers
Analysis of industrial boiler solid waste impacts, 753
Scrubbers, Design
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
Scrubbing
A comparative assessment of flue gas treatment processes part I—status and design basis, 421
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
Shenandoah Valley
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Significant Deterioration
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
Simulation Techniques
The use of Monte Carlo simulation techniques to quantify the probability of air pollutant dosages and impacts, 881
Size Separation
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Chemical analysis of size-segregated samples of Denver's ambient particulate, 247
Sludge Disposal
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
Smelters
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
Smog
Smog chamber simulation of Los Angeles pollutant transport, 648
Sodium Conditioning
Improvement of hot-side precipitator performance with sodium conditioning—an interim report, 291
Soil
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Field measurements of natural and fertilizer-induced N_2O release rates from soils, 767
Nitrous oxide emissions from drained, cultivated organic soils of South Florida, 1173
Soiling Index
Analysis of air quality data during a day of relatively low emissions, 678
Solid Waste Disposal
Analysis of industrial boiler solid waste impacts, 753
Disposal of hazardous wastes: problems and pitfalls, 127
Source Inventories
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
Source Sampling
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Spectrometry
Remote SO_2 mass flux measurements using COSPEC, 381
Spectrophotometric Analysis
Visual colorimetric formaldehyde screening analysis for indoor air, 1181
Stability
Comparison of observed and predicted sector-averaged air concentrations for elevated releases of fluorescein particles, 871
Stack Design
A simple technique for determining the maximum ground level concentration of an elevated gaseous release, 866
Stack Sampling
Analytical techniques for evaluation of oxidation catalysts for the abatement of paint bake oven emissions, 46
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Standards
Air pollution control strategy in the Federal Republic of Germany, 24
An approach to setting a sulfur standard for coal, 673
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
report on the ninth APCA government affairs seminar—NCAQ report to congress: review and response, 629
State Implementation Plans
Citizens against the Refinery's Effects, Inc. v. United States Environmental Protection Agency, 1235
Maturing environmentalism, 967
Review of the performance of the RAM model in predicting highest measured concentrations, 148
Stationary Sources
Cost-effectiveness of a photochemical oxidant episode regulation, 651
Statistical Analysis
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Limitations of the use of hospital statistics as an index of morbidity in environmental studies, 1276
Steel Industry
Air pollution control in the iron and steel industry, 1053
Blast furnace casthouse control technology and recent emissions test data, 1060
Design and operation of a pulse jet baghouse system on a 70-ton arc furnace, 1058
Illinois Environmental Protection Agency v. Pollution Control Board, 346
Method for determining mass particulate emissions from roof monitors, 1066
United States Steel Corporation v. Environmental Protection Agency, 789
United States Steel Corporation v. Williams, Director, 1137
Steelmaking processes
Alabama Air Pollution Control Commission v. Republic Steel Corporation, 1357
Stomatal Conductance
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Stratospheric Sources
Comment on "the impact of stratospheric ozone on tropospheric air quality", 400
Comment on "the impact of stratospheric ozone on tropospheric air quality": author's reply, 402
Sulfates
Apparatus for simultaneous size-differentiated sampling of optical and suboptical aerosols: application to analysis of nitrates and sulfates, 784
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Personal exposure to respirable particulates and sulfates, 153
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Sulfur Compounds
An approach to setting a sulfur standard for coal, 673
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Emission survey of biogenic sulfur flux from terrestrial surfaces, 256
Sulfur gas emissions from stored flue gas desulfurization sludges, 557
Sulfur Dioxide
Air pollution and asthma: search for a relationship, 370
Air pollution constraints on increased coal use by industry—an international perspective, 349
Air quality control equipment guarantees, 808
An alternative technique for analyzing sulfur dioxide concentrations from a single source, 773
Analysis of air quality data during a day of relatively low emissions, 678
Analysis of industrial boiler solid waste impacts, 753
A performance test for the aromatic hydrocarbon cutter used in pulsed fluorescent sulfur dioxide analyzers, 1101
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Cincinnati Gas and Electric Company v. Costle, 917
Columbus and Southern Ohio Electric Company v. Costle, 1031
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Determination of atmospheric sulfur dioxide without tetrachloromercurate (II): further refinements of a pararosaniline method and field application, 779
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
Evaluation of RAM Model for Cleveland, Ohio, 253
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
PPG Industries, Inc. v. Costle, 615
Remote SO_2 mass flux measurements using COSPEC, 381
Review of the performance of the RAM model in predicting highest measured concentrations, 148
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249
The prevention of significant deterioration of air quality—summary of the final federal regulation (August 7, 1980), 136
The relationship between air pollution and emergency room visits in an industrial community, 236
Sulfur Dioxide, Concentration
Application of ATDL type models to Bombay, 998
Sulfur Dioxide, Emission
Kennecott Copper Corporation v. New Mexico Environmental Improvement Board, 181
United States Steel Corporation v. Williams, Director, 1137
Sulfuric Acid
The relative contributions of sulfuric and nitric acids in acid rain to the acidification of the ecosystem—implications for control strategies, 1184
Sulfur Oxides
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Surveys
Perception of aircraft noise in India, 1282
Suspended Particulates
A study of the relationship between wind speed and total suspended particulate levels, 395
A survey of ambient air levels of arsenic and cadmium in El Paso, Texas from 1972–1979, 261
Systems Design
Continuous monitoring for sulfur dioxide at a utility boiler equipped with a limestone scrubber, 192
Minnesota Power's operating experience with integrated particulate and SO_2 scrubbing, 701
Temperature Effects
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Recent developments on a real-time particulate mass monitor for stack emission applications, 1194
Terpenes
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
Test Facilities
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
The EPA/DRI Valmont electrostatic precipitator test facility, 908
Test Methods
Influence of fiber diameter on pressure drop and filtration efficiency of glass fiber mats, 95
The adipic acid enhanced limestone flue gas desulfurization process: an assessment, 1249

Time Study
Inertial deposition of small particles on a sphere at intermediate and high Reynolds numbers: a time dependent study, 981
Tobacco
Cadmium in foliage alters plant response to tobacco mosaic virus, 166
Topography
Transport of pollutants along the western shore of Lake Michigan, 385
Total Suspended Particulates (TSP)
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
General Motors Corporation v. Costle, 713
Some heavy-metal pollutants in the air of Naples, 881
The contributions of open sources to ambient TSP levels, 549
The inadequacy of PSD increments to protect visibility in class I areas, 879
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Transport of PAH into New York City, 567
Toxic Chemicals
Air pollution evaluations using risk assessment methodology, 120
Control techniques for gas emissions from hazardous waste landfills, 132
Disposal of hazardous wastes: problems and pitfalls, 127
Monitoring a chlorine spill from a train derailment, 122
Toxic air contaminants—selected papers from an APCA conference, 119
Toxicity
Air pollution evaluations using risk assessment methodology, 120
A regulatory framework for setting air emission limits for noncriteria pollutants, 160
Trace Analysis
Characterization of sulfate emissions from nonutility boilers firing low-S residual oils in New York City, 139
Tracers
Comment on "the impact of stratospheric ozone on tropospheric air quality", 400
Comment on "the impact of stratospheric ozone on tropospheric air quality": author's reply, 402
Tradeoffs
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Traditional Sources
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Traffic
Effect of meteorology on the atmospheric concentrations of traffic-related pollutants at a Los Angeles site, 1098
Evaporative hydrocarbon emissions from a large vehicle population, 1191
Transferable Emission Reduction Assessments (TERA)
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Transmission
A source of gaseous HNO_3 and its transmission efficiency through various materials, 787
Transport
Ambient ozone measurements in Norway 1975–1979, 1187
Effect of hydrocarbon and NO_x on photochemical smog formation under simulated transport conditions, 1169
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Transportation
Economic development and air quality: complementary goals for local government, 1155
Motor vehicle inspection/maintenance programs. A critical review: comments, 958
Trees
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
The suppression of microbial aerosols by vegetation, 1279
Trend Analysis
Long-term trends in ambient lead levels at five locations in New Jersey, 783
Trends in benzo(a)pyrene, 1966–77, 62
Troposphere
Comment on "the impact of stratospheric ozone on tropospheric air quality", 400
Comment on "the impact of stratospheric ozone on tropospheric air quality": author's reply, 402
Tunnels
CO emission rates for in-use gasoline and diesel vehicles, 1094
Turbines
Control of particulate emissions from turbine engine test cells by cooling water injection, 675
Turbulence
Application of ATDL type models to Bombay, 998
Ultraviolet Absorption
Atmospheric factors influencing daily sulfate concentrations in Chicago air, 1197
United Kingdom
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Urban Dwellings
Use of gas ranges for cooking and heating in urban dwellings, 162
Urban Models
Sensitivity studies of the effects of model formulation on the evaluation of control strategies for photochemical air pollution formation in the United Kingdom, 1260
Urban Pollutant Levels
Ambient ozone concentration patterns among Eastern U.S. urban areas using factor analysis, 762
An *in vitro* system for assessing lung cell response to ozone, 993
Evaluation of RAM Model for Cleveland, Ohio, 253
Review of the performance of the RAM model in predicting highest measured concentrations, 148
Smog chamber simulation of Los Angeles pollutant transport, 648
The role of natural organics in photochemical air pollution—issues and research needs, 229
Transport of PAH into New York City, 567
Urban Sources
Determining the contributions of traditional and nontraditional sources of particulate matter, 17
Trends in benzo(a)pyrene, 1966–77, 62
Variances
United States Steel Corporation v. Williams, Director, 1137
Vegetation Effects
Acid rain and environmental policy, 1071
Cadmium in foliage alters plant response to tobacco mosaic virus, 166
Comparative ozone dose response of gas exchange in a ponderosa pine stand exposed to long-term fumigations, 38
Effects of sulfur dioxide on volatile terpene emission from balsam fir, 65
The suppression of microbial aerosols by vegetation, 1279
Virginia
Citizens against the Refinery's Effects, Inc. v. United States Environmental Protection Agency, 1235
Visibility
Advection fog formation in a polluted atmosphere, 55
Particulate elemental carbon in the atmosphere, 935
The inadequacy of PSD increments to protect visibility in class I areas, 879
The nature and sources of haze in the Shenandoah Valley/Blue Ridge Mountains area, 1074
Volatile Organic Compounds (VOC)
Adsorption of automotive paint solvents on activated carbon: I. equilibrium adsorption of single vapors, 861
Emission fees and TERA: an evaluation of policy alternatives in the twin cities, 839
Volcanic Pollution
Inhalable particulate levels in northern Idaho from the initial eruptions of Mount St. Helens, 71
Remote SO_2 mass flux measurements using COSPEC, 381
Waste Disposal
Adsorption of hydrochloric acid on solid slaked lime for flue gas clean up, 1177
Utilization of dry calcium based flue gas desulfurization waste as a hazardous waste fixation agent, 751
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744
Waste Treatment
Waste treatment and disposal aspects: combustion and air pollution control processes introduction, 744
Waste Water
The suppression of microbial aerosols by vegetation, 1279
Water Heaters
Particulate and gaseous emissions from natural gas furnaces and water heaters, 1268
Water, Process
Air quality effects from quenching coke with fresh versus process water, 1054
Wetlands
Biogenic sulfur gas emissions from soils in Eastern and Southeastern United States, 1083
Wind Effects
A study of the relationship between wind speed and total suspended particulate levels, 395
Wind Tunnels
The suppression of microbial aerosols by vegetation, 1279
X-ray Analysis
Provenance factor analysis of fugitive dust produced in Rapid City, South Dakota, 241
Tethered balloon sampling systems for monitoring air pollution, 735
Zero Air System
Development of a portable zero air system, 882